

29. (New) An anatomical brace as claimed in claim 25 wherein the upper and lower housings have four movably positioned sockets each configured to accommodate one respective perpendicular end of each respective arm member for multi-planar movement between said first and second cuff.

30. (New) An anatomical brace as claimed in claim 29 wherein the sockets are generally spherical sockets.

31. (New) An anatomical brace as claimed in claim 25 wherein the cable assembly includes a distance adjuster.

32. (New) An anatomical brace as claimed in claim 31 wherein the distance adjuster is a pivotable distance adjuster.

REMARKS

Examiner's Rejections and Objections

The foregoing Amendment and remarks which follow are responsive to the initial Office Action mailed September 11, 2003. In that Office Action, the Examiner first rejected Claims 1, 5, 9, 13, 17 and 21 under 35 U.S.C. §112, first paragraph, for failing to comply with the enablement requirement because the claim terminology "frame structure" lacks proper antecedent basis in the specification. To resolve this issue, Applicant has amended all of those claims to recite "upper and lower housings" in place of "frame structure" in order to be more consistent with its patent specification. (See, for example, Patent Application, pages 5 and 6). As such, it is respectfully

submitted that the Examiner's pending §112 rejection is now overcome.

Further in that Office Action, the Examiner objected to Claims 2-4, 6-8, 10-12, 14-16, 18-20 and 22-24 for being dependent on rejected independent claims. Applicant respectfully submits that this issue is now resolved since their respective independent claims have now been amended to address the above §112 rejection.

Even still further in that Office Action, the Examiner objected to Claims 1, 5, 9, 13, 17 and 21 because the claim terminology "the uniting pivoting joint" lacks proper antecedent basis. Applicant respectfully points out that "the uniting pivoting joint" refers to a certain position of an anatomy and that terminology is already introduced in the preamble of each of those claims. (See, Claim Preambles - "a uniting pivoting joint situated between a first limb structure and a second limb structure of a living being"). As such, it is respectfully submitted that proper antecedent basis is already provided for the claim terminology at issue.

Moreover, the Examiner rejected Claims 1-4, 9-12 and 17-20 under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being obvious over the Knoth reference ("Knoth"), or the Clemens et al. reference ("Clemens"), or the Rainey reference ("Rainey"). The Examiner also rejected Claims 5-7, 13-15 and 21-23 under 35 U.S.C.

§102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being obvious over the Flemming reference ("Flemming").

Importantly, even though the Examiner objected to Claims 8, 16 and 24 as being dependent upon a rejected base claim, the Examiner however indicated that such claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Amended Independent Claim 5

Applicant has amended independent Claim 5 to incorporate the substance of allowable dependent Claim 8, and its intervening Claim 7. In this respect, Applicant respectfully submits that amended base Claim 5 is now allowable. Dependent Claim 6 is a further limitation of the amended base Claim 5. Insofar as the amended base Claim 5 is believed to be allowable, its dependent Claim 6 is also believed to be allowable.

Amended Independent Claim 13

Likewise, Applicant has amended independent Claim 13 to incorporate the substance of allowable dependent Claim 16, and intervening dependent Claim 15. Applicant respectfully submits that amended base Claim 13 is thus allowable. Dependent Claim 14 is a further limitation of the amended base Claim 13. Insofar as the amended base Claim 13 is believed to be

allowable, its dependent Claim 14 are also believed to be allowable.

Amended Independent Claim 21

Along the same note, Applicant has amended independent Claim 21 to incorporate the substance of allowable dependent Claim 24, and intervening dependent Claim 23. Applicant respectfully submits that amended base Claim 21 is thus allowable. Dependent Claim 22 is a further limitation of the amended base Claim 21. Insofar as the amended base Claim 21 is believed to be allowable, its dependent Claim 22 is also believed to be allowable.

Amended Independent Claims 1, 9 and 17 & New Independent Claim 25

Amended independent Claims, 1, 9 and 17, and new independent Claim 25, are also believed to incorporate allowable subject matter. Specifically, Applicant respectfully submits that each of those claims contain subject matter which the Examiner deemed to be allowable. More specifically, amended independent Claims 1, 9 and 17, and new independent Claim 25, each recite an anatomical brace which includes a brace joint having "a cable assembly comprising a cable extending from the rearward arm member to the first cuff, the cable assembly including a cable length adjuster for regulating pivotable

distance of the first and second cuffs in relation to each other."

Applicant feels that such recitation of elements, along with other enumerated elements of amended/new base Claims 1, 9, 17 and 25, will be sufficient to patentably distinguish the present invention over the cited prior art of relevance, namely, Knoth, Clemens, Rainey or Flemming. Simply put, it is respectfully submitted that the cited prior art references fail to anticipate or obviate the present invention recited in those claims.

1. Knoth In View of the Present Invention

Even though the Knoth reference is generally directed toward a knee brace, it is not understood to disclose the present invention's specific combination of elements as recited in amended/new independent Claims 1, 9, 17 and 25, and more particularly fails to teach or suggest its cable assembly with (1) a cable extending from the rearward arm member to the first cuff, and (2) a cable length adjuster for regulating pivotable distance of the first and second cuffs in relation to each other. Rather, Applicant submits that Knoth is devoted to an unrelated concept of providing a "limb brace incorporating an adjustable resistance unit . . . for conveniently selecting between no resistance and a resistance." (Column 1, lines 41-45). More particularly, Knoth clarifies that the "resistance to articulated movement of the brace may be selected between low

resistance and maximum resistance, simply by selectively rotating a set of three control members or rings." (Column 3, lines 43-46). As understood, this is essentially the extent of Knoth's disclosure, and there is no teaching or suggestion as to the emphasized features of the cable assembly noted above.

2. Clemens In View of the Present Invention

Likewise, the Clemens reference is also not understood to disclose the present invention's recitation of a cable assembly with (1) a cable extending from the rearward arm member to the first cuff, and (2) a cable length adjuster for regulating pivotable distance of the first and second cuffs in relation to each other. Instead, it is respectfully submitted that Clemens is directed to a different concept of providing "a splint which applies a constant, preadjusted torque across a hinged joint undergoing rehabilitation." (Column 1, lines 6-9). Although Clemens may show the use of a cable, such cable is not believed to include, among others, a cable length adjuster for regulating pivotable distance of the first and second cuffs in relation to each other. As understood, Clemens does not have the feature of a cable length adjuster, and even its cable is used for a wholly unrelated purpose which is to "apply the desired amount of constant torque to the gear 29 and strut 5." (Column 8, lines 15-16). Indeed, such use of the cable truly corresponds to the overall objective of Clemens' invention. In this regard, Applicant respectfully submits that there is no teaching or

suggestion in Clemens as to the emphasized features of the present invention's cable assembly as amply indicated above.

3. Rainey In View of the Present Invention

Similarly, the Rainey reference is also not understood to disclose the present invention's recitation of a cable assembly with (1) a cable extending from the rearward arm member to the first cuff, and (2) a cable length adjuster for regulating pivotable distance of the first and second cuffs in relation to each other. As Applicant understands, Rainey simply focuses upon a concept of providing "a simple, lightweight leg brace which has a joint between upper and lower sections thereof which simulates the action of one's knee." (Column 1, lines 35-37). Even though Rainey may disclose the use of a cable, such cable is not believed to show, among others, a cable length adjuster for regulating pivotable distance of the first and second cuffs in relation to each other. Applicant submits that Rainey fails to disclose the feature of a cable length adjuster, and even its cable is used for a different purpose than the present invention's version of the cable. (See, Column 3, lines 66-68 - "In order that the links 58 may automatically move to a released position during the walking operation, there is provided a trip cable 76."). As such, it is submitted that Rainey fails to teach, suggest, or even imply the above emphasized features of the present invention's cable assembly.

4. Flemming In View of the Present Invention

The Flemming reference is further not understood to disclose the present invention's recitation of a cable assembly with (1) a cable extending from the rearward arm member to the first cuff, and (2) a cable length adjuster for regulating pivotable distance of the first and second cuffs in relation to each other. More specifically, Flemming is understood to relate to "an antifriction mechanical joint for" orthopedic braces or prosthetics. (Column 1, lines 8-9). Based upon Applicant's thorough review of the Flemming reference, Applicant simply understands Flemming to not include any use of the cable assembly, and especially, among others, an associated cable length adjuster for regulating pivotable distance of the first and second cuffs in relation to each other. At best, Applicant respectfully submits that Flemming merely shows the use of an elastic member "to urge the second bearing from a flexed position to an extended position. (Column 4, lines 24-25). By doing so, Flemming alleges that the "elastic member eliminates anterior-posterior movement of the lower parts of the brace (24 and 42) relative to the upper parts (18 and 40)." (Column 4, lines 25-27). Hence, Applicant respectfully submits that Flemming fails to teach, suggest or imply the present invention's feature of the cable assembly and its cable length adjuster.

In conclusion, it is respectfully submitted that none of the cited prior art references discloses the present invention's

feature of a cable assembly with (1) a cable extending from the rearward arm member to the first cuff, and (2) a cable length adjuster for regulating pivotable distance of the first and second cuffs in relation to each other. Applicant respectfully submits that even when those references are combined, such emphasized feature of the present invention is not disclosed by the prior art references.

Applicant respectfully submits that the amended base Claims 1, 9 and 17, and new base Claim 25, are allowable. Insofar as the amended base Claims 1, 9 and 17, and new base Claim 25 are believed to be allowable, their dependent claims are also believed to be allowable as they are further limitations of their respective independent claims.

Request for Allowance

On the basis of the foregoing, Applicant respectfully submits that all the stated grounds of rejections have been overcome, and that all of the pending claims are now in condition for allowance. An early Notice of Allowance is therefore respectfully requested.

Should the Examiner have any suggestions for expediting allowance of the application, the Examiner is invited to contact Applicant's representative at the telephone number listed below.

Respectfully submitted,

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By: 

In. H. Kim
Registration No. 44,184
STETINA BRUNDA GARRED & BRUCKER
75 Enterprise, Suite 250
Aliso Viejo, CA 92656
(949) 855-1246

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